

REMARKS:

This application has been carefully studied and amended in view of the Office Action dated March 7, 2005. Reconsideration of that action is requested in view of the following.

Claim 1 has been amended to more clearly define the invention. Claims 7-20 have been added to complete the claim coverage. As now amended claim 1 is directed to the version of the probe vibrating assembly best illustrated in Figure 6 where a clamp mechanism is secured to a cylinder so as to move the cylinder back and forth. The probe extends through the cylinder and is mounted to the cylinder for joint back and forth movement.

Figure 6 specifically illustrates an arrangement which has particular utility for collecting specimens such as cancerous tissue from a tumor. As illustrated in Figure 6 the assembly includes an oscillating head which would be of the type described and illustrated in Figures 1-5 wherein a spindle rotates about its longitudinal axis with a drive member eccentrically mounted to the spindle. The drive member is secured to a clamp mechanism. Thus, as the spindle rotates the eccentrically mounted drive mechanism causes the clamp mechanism to move back and forth in a path or direction perpendicular to the longitudinal axis of the spindle. As shown in the embodiment of Figures 6-8 the clamp mechanism 16 is mounted to the cylinder 70 thereby causing the cylinder to reciprocate back and forth. A

second clamping assembly 16A is mounted to a plunger 72 telescoped into the cylinder. The second clamping assembly holds the plunger stationary while the outer cylinder is moving back and forth. Where the probe in this preferred practice is a needle having a knife edge the back and forth movement of the needle jointly with the back and forth movement of the cylinder breaks up the tumor tissue to permit, for example, cancerous tissue to be removed. In an advantageous practice of the invention where the piston and cylinder are part of a closed system or aspiration structure, suction can be created by outward pulling a handle 76 secured to the needle. This outward pull thereby creates the suction to remove the tissue specimen.

Claim 1 defines the probe vibrating assembly as including a rotatable spindle having a drive member eccentrically mounted to the spindle. The drive member is secured to the clamp mechanism to cause the clamp mechanism to move back and forth in accordance with the movement of the drive member. As now recited in claim 1, a cylinder is clamped to the clamp mechanism thereby transmitting the back and forth movement to the cylinder. The probe extends through the cylinder and is mounted for joint back and forth movement with the cylinder. The probe extends through the cylinder and the probe which is mounted to a medical scope also extends outwardly beyond the medical scope.

It is respectfully submitted that parent claim 1,

particularly as now amended, and its dependent claims are patentable over the prior art and specifically over Schaaf. Schaaf relates to a device for improving drainage within the eye. The device is best shown in Figure 6A. As shown therein the tool 35 is coupled by a coupling 75 to shaft 66 of motor 65 in such a manner as to reciprocate longitudinally as indicated by the arrow X.2. The tool slides within guide 34 which in turn is mounted in channel 33. In rejecting the claims over Schaaf Examiner Kasztejna interpreted Schaaf as having a spindle 70 with a drive member 66 eccentrically mounted to the spindle and with a clamp mechanism 75. Column 9, line 65 to column 10, line 14 describes this structure in greater detail. As described therein the coupling 75 comprises a pressure piece 71 which is fastened to the proximal end of surgical tool 35 within the guide tube 34.

Based upon the above noted description in Schaaf it would appear that the tool 35 would be considered as corresponding to the probe. It is not apparent, however, what would correspond to the cylinder of claim 1, whether it is the guide 34 or the channel 33. What is clear, however, is that the coupling 75 (which the examiner construed as the clamp mechanism) is mounted directly to the tool and is not clamped to any cylinder, nor is there any suggestion in Schaaf for having joint back and forth movement of a cylinder and probe. Accordingly, claim 1 clearly distinguishes over Schaaf.

Dependent claims 2-20 should be allowed not only for their dependency on claim 1, but also for the features described in the various claims. Some of those features will be noted.

Claim 4 is dependent on claim 1 and points out that the probe is a flexible needle for breaking up a tumor tissue to facilitate the tissue being removed. This differs from the purpose and intent of Schaaf.

Claim 5 adds to its parent claim 4 that a plunger is telescopically mounted in the cylinder for relative motion between the cylinder and plunger. As previously noted Schaaf does not disclose having the clamping mechanism move a cylinder. Moreover, it is not apparent what structure in Schaaf would correspond to a cylinder and a plunger which have relative motion between them.

Claim 6 adds to claim 5 that the plunger and cylinder are part of an aspiration structure. Claim 7 is dependent on claim 6 and further defines the aspiration structure as including a pull handle mounted to the outer end of the needle so that upon outwardly pulling of the pull handle a suction is created to permit broken up tissue to be removed. Although Schaaf refers to aspiration structures, the specific structure defined in claims 6 and 7 is not disclosed or suggested.

Claim 8 is dependent on claim 4 and defines structure of the drive arrangement including the feature of the back and forth

motion being perpendicular to the longitudinal axis of the spindle. In Schaaf the back and forth motion designated as X.2 is parallel and not perpendicular to the longitudinal axis of the actuator 70 which the examiner construed as corresponding to the spindle.

Claim 12 adds to its parent claim details of the clamp mechanism not disclosed in Schaaf.

Claim 14 also defines the back and forth motion as being in a direction perpendicular to the longitudinal axis of the spindle which as noted with respect to claim 11 is not disclosed in Schaaf.

Claim 15 also adds the feature of a pull handle mounted to the outer end of the needle outwardly of the cylinder.

Claim 16 is similar to claim 12 in that it relates to details of the clamp mechanism.

Claim 17 adds the feature of a clamping assembly holding the plunger in a fixed position while the clamp mechanism permits the cylinder to reciprocate. Such structure is clearly not shown in Schaaf.

Claim 18 is dependent on claim 1 and adds the features of claim 11 including, inter alia, the back and forth motion being in a direction perpendicular to the longitudinal axis of the spindle.

Claim 19 is dependent directly on claim 18 and is otherwise

similar to claims 12 and 16 regarding the details of the clamp mechanism.

Claim 20 is dependent on claim 19 and adds further details of the clamp mechanism not shown or suggested by Schaaf.

In view of the above remarks and amendments this application should be passed to issue.

Respectfully submitted,

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